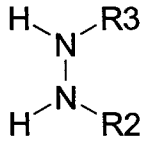
CLAIMS AMENDMENTS

1. – 20. (cancelled).

21. (currently amended) Process to produce hydrazides, comprising the reaction of a dicarboxylic acid having general formula (I):

$(R^1CH)_n (COOH)_2$ (I)

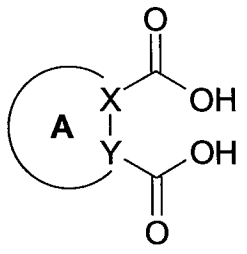
wherein R1 ~~can be~~ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, aromatic heterocyclic ring ~~containing as~~ having a heteroatom selected from the group consisting of S, O and~~/or~~ N, heterocyclic non-aromatic ring ~~containing as~~ having a heteroatom selected from the group consisting of S, O and~~/or~~ N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, and cycloalkynyl containing from 7 to 8 carbon atoms; ~~all the described~~ and wherein the R1 groups can be further substituted and/or branched;
n is 1 or 2;
with a hydrazine of general formula (II)



(II)

wherein R2 and R3 are, independently, selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, heterocyclic aromatics ~~containing as~~ having a heteroatom selected from the group consisting of S, O and~~/or~~ N, heterocyclic non-aromatics ~~containing as~~ having a heteroatom selected from the group consisting of S, O and~~/or~~ N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, and cycloalkynyl containing from 7 to 8 carbon atoms;
wherein the hydrazine is soluble in water ~~on~~ or in a reaction solvent;
wherein the reaction occurs at room temperature;
in the presence of a Lewis acid.

22. (currently amended) Process to produce hydrazides, comprising the reaction of a dicarboxylic acid having general formula (III):



(III)

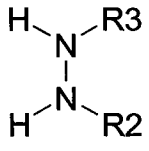
wherein A ~~can be~~ is selected from the group consisting of an aromatic heterocyclic ring containing from 4 to 8 atoms ~~wherein the heteroatom is S, O and/or N,~~ and a non-aromatic heterocyclic ring containing from 4 to 8 atoms, wherein the heteroatom is selected fro the group consisting of S, O and/~~or~~ N~~;~~, and wherein ~~all the described groups~~ A can be further substituted and/or branched;

ring A can further have 1 or more fused ring, wherein the ring is aromatic, non-aromatic, aromatic heterocyclic, non-aromatic heterocyclic and mixtures thereof, and wherein the heteroatom ~~can be~~ is selected from the group consisting of N, O, and/~~or~~ S;

X is C or N;

Y is C or N;

with a hydrazine of general formula (II)



(II)

wherein R2 and R3 are, independently, selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, heterocyclic aromatics ~~containing as~~ having a heteroatom selected from the group consisting of S, O and/~~or~~ N, heterocyclic non-aromatics ~~containing as~~ having a heteroatom selected from the group consisting of S, O and/~~or~~ N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms;

wherein the hydrazine is soluble in water or in a reaction solvent;

wherein the reaction occurs at room temperature;

in the presence of a Lewis acid.

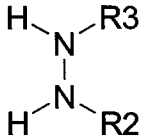
23. (previously presented) Process according to claim 21, wherein the Lewis acid is a halide donator.

24. (currently amended) Process according to claim 23, wherein the Lewis acid is a halide donator ~~chosen~~ selected from the group consisting of aluminum chloride, antimony trichloride, antimony pentachloride, arsenic trichloride, arsenic pentachloride, beryllium chloride, bismuth trichloride, boron trifluoride, boron trichloride, cadmium chloride, copper chloride (I), copper chloride (II), cobalt chloride, chromo trichloride, gallium chloride, iron chloride (III), mercury chloride (II), magnesium chloride, magnesium bromide, nickel chloride, niobium pentachloride, titanium dichloride, titanium trichloride, titanium tetrachloride, tellurium tetrachloride, uranium tetrachloride, zirconium tetrachloride, and mixtures ~~of them~~ thereof.

25. (currently amended) Process ~~according to claim 24~~ to produce hydrazides, comprising the reaction of a dicarboxylic acid having general formula (I):

$(R^1CH)_n(COOH)_2$ (I)

wherein R1 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, aromatic heterocyclic ring having a heteroatom selected from the group consisting of S, O and N, heterocyclic non-aromatic ring having a heteroatom selected from the group consisting of S, O and N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms; and wherein the R1 group can be further substituted and/or branched;
n is 1 or 2;
with a hydrazine of general formula (II)



(II)

wherein R2 and R3 are, independently, selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, heterocyclic aromatics having a heteroatom selected from the group consisting of S, O and N, heterocyclic non-aromatics having a heteroatom selected from the group consisting of S, O and N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms;
wherein the hydrazine is soluble in water on or in a reaction solvent;
wherein the reaction occurs at room temperature;
in the presence of a Lewis acid,
wherein the halide donator Lewis acid is niobium pentachloride.

26. (previously presented) Process according to claim 21, wherein the dicarboxylic acid is suspended in an organic solvent.

27. (previously presented) Process according to claim 26, wherein the organic solvent is an aprotic polar organic solvent.

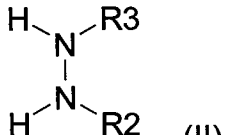
28. (currently amended) Process according to claim 27, wherein the solvent is chosen from the group consisting of dioxane, acetone, methylpyrrolidone, dimethylsulfoxide, N,N-dimethylformamide, and mixtures ~~of them~~ thereof.

29. (cancelled).

30. (currently amended) Process ~~according to claim 21~~ to produce hydrazides, comprising the reaction of a dicarboxylic acid having general formula (I):

$(R^1CH)_n(COOH)_2$ (I)

wherein R1 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, aromatic heterocyclic ring having a heteroatom selected from the group consisting of S, O and N, heterocyclic non-aromatic ring having a heteroatom selected from the group consisting of S, O and N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms; and wherein the R1 group can be further substituted and/or branched;
n is 1 or 2;
with a hydrazine of general formula (II)



(II)

wherein R2 and R3 are, independently, selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, heterocyclic aromatics having a heteroatom selected from the group consisting of S, O and N, heterocyclic non-aromatics having a heteroatom selected from the group consisting of S, O and N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms;
wherein the hydrazine is soluble in water on or in a reaction solvent;
wherein the reaction occurs at room temperature;
in the presence of a Lewis acid,
further comprising the reaction of 1-nitro-phtalic acid with the hydrazine in the presence of niobium pentachloride.

31. (previously presented) Process according to claim 30, wherein the Lewis acid is a halide donator.

32. (currently amended) Process according to claim 31, wherein the Lewis acid is a halide donator ~~chosen~~ selected from the group consisting of aluminum chloride, antimony trichloride, antimony pentachloride, arsenic trichloride, arsenic pentachloride, beryllium chloride, bismuth trichloride, boron trifluoride, boron trichloride, cadmium chloride, copper chloride (I), copper chloride (II), cobalt chloride, chromo trichloride, gallium chloride, iron chloride (III), mercury chloride (II), magnesium chloride, magnesium bromide, nickel chloride, niobium pentachloride, titanium dichloride, titanium trichloride, titanium tetrachloride, tellurium tetrachloride, uranium tetrachloride, zirconium tetrachloride, and mixtures ~~of them~~ thereof.

33. (previously presented) Process according to claim 32, wherein the halide donator Lewis acid is niobium pentachloride.

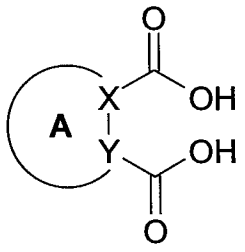
34. (previously presented) Process according to claim 22, wherein the dicarboxylic acid is suspended in an organic solvent.

35. (previously presented) Process according to claim 34, wherein the organic solvent is an aprotic polar organic solvent.

36. (currently amended) Process according to claim 35, wherein the solvent is ~~chosen~~ selected from the group consisting of dioxane, acetone, methylpyrrolidone, dimethylsulfoxide, N,N-dimethylformamide, and mixtures ~~of them~~ thereof.

37. (cancelled).

38. (currently amended) Process ~~according to claim 22~~ to produce hydrazides, comprising the reaction of a dicarboxylic acid having general formula (III):



(III)

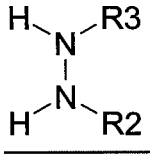
wherein A is selected from the group consisting of an aromatic heterocyclic ring containing from 4 to 8 atoms and a non-aromatic heterocyclic ring containing from 4 to 8 atoms, wherein the heteroatom is selected from the group consisting of S, O and N, and wherein A can be further substituted and/or branched;

ring A can further have 1 or more fused ring, wherein the ring is aromatic, non-aromatic, aromatic heterocyclic, non-aromatic heterocyclic and mixtures thereof, wherein the heteroatom is selected from the group consisting of N, O, and S;

X is C or N;

Y is C or N;

with a hydrazine of general formula (II)



(II)

wherein R2 and R3 are, independently, selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, phenyl, heterocyclic aromatics having a heteroatom selected from the group consisting of S, O and N, heterocyclic non-aromatics having a heteroatom selected from the group consisting of S, O and N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkynyl containing from 7 to 8 carbon atoms;

wherein the hydrazine is soluble in water or in a reaction solvent;

wherein the reaction occurs at room temperature;

in the presence of a Lewis acid,

further comprising the reaction of 1-nitro-phtalic acid with the hydrazine in the presence of niobium pentachloride.